

# Colorado Department of Public Health and Environment OPERATING PERMIT

CoorsTek, Inc.

First Issued August 1, 1999

# AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: CoorsTek, Inc. OPERATING PERMIT NUMBER

FACILITY ID: 0590066 **980PJE205** 

RENEWED: October 1, 2004

EXPIRATION DATE: October 1, 2009

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION:

CoorsTek, Inc. 600 Ninth Street 16000 Table Mountain Parkway Golden, CO 80401 Golden, CO 80403 Jefferson County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received: August 4, 2003

And Additional Information Received:

Nature of Business: Industrial Ceramic Manufacturing

Primary SIC: 3264

RESPONSIBLE OFFICIALS

Name: Lee Harder/Frank Anderson

Title: General Manager/Director of Materials

FACILITY CONTACT PERSON

Name: Andrew T. McLaughlin

Title: Corporate EHS Manager

Systems Manager

Phone: (303) 277-4075/(303) 277-4840 Phone: (303) 277-4197

### SUBMITTAL DEADLINES

Semi-Annual Monitoring Period: July 1 – December 31, January 1 – June 30

Semi-Annual Monitoring Report: January 31, 2005 and July 31, 2005 and subsequent years

Annual Compliance Period: Begins July 1 – June 30

Annual Compliance Certification: July 31, 2005 and subsequent years

Note that the Semi-Annual Monitoring reports and the Annual Compliance report must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports.

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### **SECTION II - General Activities and Summary**

### 1. Permitted Activities

1.1 This facility consists of an industrial ceramic manufacturing facility which falls into the Standard Industrial Classification 3264. The facility consists of twenty three (23) natural gas-fired kilns, four (4) natural gas-fired spray dryers, Rubber mold press area and numerous insignificant activities.

The facility is located at 600 Ninth Street, Golden, in Jefferson County. The area in which the plant operates is designated as attainment/maintenance for ozone, carbon monoxide, and particulate matter less than 10 microns ( $PM_{10}$ ). Under that classification, all SIP-approved requirements for VOC, CO, and  $PM_{10}$  will continue to apply in order to prevent backsliding under the provisions of Section 110(l) of the Federal Clean Air Act.

There are no affected states within 50 miles of the plant. The following Federal Class I designated areas are within 100 kilometers of the plant: Rocky Mountain National Park.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 This Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source review requirements of Part B. Any revisions made using the provisions of Regulation No 3, Part C shall become new applicable requirements for purposes of this operating permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permit: 95JE1059.
- 1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Section II Condition 1.3 (Regulation No. 6, Part B PM emission standard only), and 1.7 (opacity). Section IV Conditions 14 and 18 (as noted).
- 1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit.

### 2. Alternative Operating Scenarios

- 2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.
  - 2.1.1 No separate operating scenarios have been specified.

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### 3. Prevention of Significant Deterioration (PSD)

3.1 Based on the information provided by the applicant, this facility is not categorized as a major stationary source (no single criteria pollutant emissions with a Potential to Emit of greater than 250 TPY) as of the issue date of this permit. The source therefore is not subject to the PSD review requirements of 40 CFR 52.21 (Colorado Regulation No. 3, Part B, Section IV.D.3).

Any future modification to this facility which is major by itself will result in the application of the PSD review requirements. In addition, future modifications at this facility may result in the facility being classified as a major stationary source. Once that threshold is exceeded, future modifications at this facility resulting in a significant net emissions increase (see Regulation No. 3, Part A, Section I.B.37 and 58) for any pollutant listed in Regulation No. 3, Part A, Section I.B.58 or a modification which is major by itself may result in the application of the PSD review requirements.

### 4. Accidental Release Prevention Program (112(r))

4.1 Based on the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

### 5. Summary of Emission Units

5.1 The emissions units regulated by this permit are the following:

| Emission<br>Unit<br>Number | AIRS<br>Stack<br>Number | Facility<br>Identifier | Description                                                                    | Pollution<br>Device | Control |
|----------------------------|-------------------------|------------------------|--------------------------------------------------------------------------------|---------------------|---------|
| L-1                        | 101                     | L-1                    | H.H. Robertson Tunnel Kiln, Rated at 5.445 MMBtu/hr (1929).                    | Uncontrolled        |         |
| L-2                        | 101                     | L-2                    | Allied Engineering Tunnel Kiln, Rated at 13.8 MMBtu/hr (1942).                 | Uncontrolled        |         |
| L-3                        | 101                     | L-3                    | Coors Ceramics Tunnel Kiln, Rated at 7.0 MMBtu/hr (1949).                      | Uncontrolled        |         |
| I-2                        | 101                     | I-2                    | Ladd-Cronin Engineering Circular Tunnel Kiln, Rated at 2.49MMBtu/hr (1934).    | Uncontrolled        |         |
| L-33                       | 102                     | L-33                   | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 20059 (1966).                | Uncontrolled        |         |
| L-68                       | 102                     | L-68                   | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 23271 (1973).                | Uncontrolled        |         |
| L-84                       | 102                     | L-84                   | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 43-228121-C1K31G (1991).     | Uncontrolled        |         |
| L-95                       | 102                     | L-95                   | Temtek-Eisenman/Champion Tunnel Kiln, Rated at 6.5 MMBtu/hr, SN: 74112 (1995). | Uncontrolled        |         |
| L-6                        | 103                     | L-6                    | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                               | Uncontrolled        |         |
| L-12                       | 103                     | L-12                   | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                               | Uncontrolled        |         |
| L-20                       | 103                     | L-20                   | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                            | Uncontrolled        |         |
| L-21                       | 103                     | L-21                   | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                            | Uncontrolled        |         |
| L-22                       | 103                     | L-22                   | Coors Updraft Kiln, Rated at 8.613 MMBtu/hr (1961).                            | Uncontrolled        |         |

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| Emission<br>Unit<br>Number | AIRS<br>Stack<br>Number | Facility<br>Identifier | Description                                                                                              | Pollution Control<br>Device           |  |
|----------------------------|-------------------------|------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------|--|
| L-23                       | 103                     | L-23                   | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                                                      | Uncontrolled                          |  |
| L-45                       | 103                     | L-45                   | Coors Tube Kiln, Rated at 7.716 MMBtu/hr (1969).                                                         | Uncontrolled                          |  |
| L-58                       | 103                     | L-58                   | Bickley Model 550 Downdraft Kiln, Rated at 4 MMBtu/hr, SN: 890 (1975).                                   | Uncontrolled                          |  |
| L-82                       | 103                     | L-82                   | Bickley 5300 - Carbell Kiln, Rated at 10 MMBtu/hr (1988).                                                | Uncontrolled                          |  |
| L-83                       | 103                     | L-83                   | Bickley 5300 - Carbell Kiln, Rated at 10 MMBtu/hr (1988).                                                | Uncontrolled                          |  |
| L-80                       | 104                     | L-80                   | Texas Kiln Co. PCS 64/1 Kiln, Rated at 6.75 MMBtu/hr (1980).                                             | Uncontrolled                          |  |
| L-18                       | 104                     | L-18                   | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1953).                                                     | Uncontrolled                          |  |
| L-19                       | 104                     | L-19                   | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1954).                                                     | Uncontrolled                          |  |
| L-8                        | 104                     | L-8                    | Harrop & Coors Test Kiln/Furnace, Rated at 0.972 MMBtu/hr (1960).                                        | Uncontrolled                          |  |
| L-81                       | 104                     | L-81                   | Harrop & Coors Test Kiln/Furnace, Rated at 0.972 MMBtu/hr (1960).                                        | Uncontrolled                          |  |
| D#1                        | 105                     | D#1                    | Coors Spray Dryer w/ Dust Collector, Rated at 3.24 MMBtu/hr (1943).                                      | Control Device<br>Inherent to Process |  |
| D#2                        | 105                     | D#2                    | Coors Spray Dryer w/ Dust Collector, Rated at 5.4 MMBtu/hr (1962).                                       | Control Device<br>Inherent to Process |  |
| D#4                        | 105                     | D#4                    | Bowen Engineering #4 Slip Spray Dryer w/ Cyclone and Wet Scrubber, Rated at 2.403 MMBtu/hr (1978).       | Control Device<br>Inherent to Process |  |
| D#5                        | 106                     | D#5                    | Ceramic Slip Dryer w/ Cyclone and Dust Collector, Rated at 4.76 MMBtu/hr, SN: 20514200-3410-SD-1 (1997). | Control Device<br>Inherent to Process |  |
| Press                      | 116                     | NA                     | Rubber Mold Press Area                                                                                   | Uncontrolled                          |  |

### **6.** Compliance Assurance Monitoring (CAM)

6.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64 as adopted by reference into Colorado Regulation No. 3, Part C, Section XIV:

None. No add on control equipment is used to meet an emission limit or standard.

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### **SECTION III - Specific Permit Terms**

### 1. Facility Wide Limits

### See Equipment List, Section I, Condition 4.1

| Parameter                                     | Permit              | Limitations                                                                                              | Compliance Emission | Monitoring                                                          |                                |  |
|-----------------------------------------------|---------------------|----------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------|--------------------------------|--|
|                                               | Condition<br>Number |                                                                                                          | Factor*             | Method                                                              | Interval                       |  |
| PM/PM <sub>10</sub>                           | 1.1                 | 12.56 tons per year                                                                                      |                     | Recordkeeping and                                                   | Monthly                        |  |
| NO <sub>x</sub>                               | 1                   | 67.17 tons per year                                                                                      |                     | Calculation                                                         |                                |  |
| СО                                            |                     | 146.29 tons per year                                                                                     |                     |                                                                     |                                |  |
| $SO_2$                                        |                     | 28.52 tons per year                                                                                      |                     |                                                                     |                                |  |
| VOC                                           |                     | 101.16 tons per year                                                                                     |                     |                                                                     |                                |  |
| Total Fuel Use                                | 1.2                 | 558.1 mmscf natural gas/year<br>6436.25 mgal propane/year                                                | NA                  | Fuel Meters                                                         | Monthly                        |  |
| PM                                            | 1.3                 | 1.1 See Section III Table                                                                                | NA                  | Kilns: Fuel Restriction Spray Dryers: Compliance with Condition 1.7 | At All Times                   |  |
| Opacity                                       | 1.4                 | Less Than or Equal to 20%, except during certain operating conditions, when opacity shall not exceed 30% | NA                  | Fuel Restriction Spray Dryers: Control Equipment                    | At All Times See Condition 1.7 |  |
|                                               | 1.6                 | L-80, L-82, L-83, L-84, L-95, and Spray Dryer #5 Less than or equal to 20% (State Only)                  | NA                  | Inspection and<br>Maintenance                                       |                                |  |
| PM/PM <sub>10</sub> and<br>Opacity - Dryer #5 | 1.5                 | 0.057 g/dscm Less than or equal to10% opacity (NSPS)                                                     | NA                  | Control Equipment<br>Maintenance                                    | See Condition 1.5              |  |

<sup>\*</sup> See following emission factor tables

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### **Emission Factors – Natural Gas (lb/mmscf)**

| Pollutant           | Low Temperature<br>Continuous Kilns | High Temperature<br>Continuous Kilns | High Temperature<br>Periodic Kilns | Low Temperature<br>Periodic Kilns | Spray Dryers |
|---------------------|-------------------------------------|--------------------------------------|------------------------------------|-----------------------------------|--------------|
| PM/PM <sub>10</sub> | 79                                  | 10                                   | 10                                 | 79                                | 73           |
| NO <sub>x</sub>     | 148                                 | 305                                  | 232                                | 75                                | 101          |
| CO                  | 370                                 | 344                                  | 735                                | 1998                              | 10           |
| $SO_2$              | 152                                 | 66                                   | 31                                 | 420                               | 5            |
| VOC                 | 239                                 | 91                                   | 263                                | 2873                              | 210          |

### **Emission Factors – Propane**

| Pollutant           | Emission Factor (lb/mgal) |
|---------------------|---------------------------|
| PM/PM <sub>10</sub> | 0.6                       |
| NO <sub>x</sub>     | 19                        |
| СО                  | 3.2                       |
| SO <sub>2</sub>     | 0.2                       |
| VOC                 | 0.5                       |

1.1 Emissions of air pollutants from the equipment listed in Section I, Condition 4.1 of this permit shall not exceed the facility wide limitations listed above (Construction permit 95JE1059 as modified under the provisions of Section I, Condition 1.3). Monthly emissions from each source shall be calculated and recorded by the end of each subsequent month using the appropriate emission factors listed above and the monthly fuel consumption in the following equations:

Tons/month = EF (lb/MMscf) x Natural Gas Fuel Consumption (MMscf/month) x 1 ton/2000 lb

Tons/month = EF (lb/Mgal) x Propane Fuel Consumption (Mgal/month) x 1 ton/2000 lb

Each source's emissions shall be summed and used in a rolling twelve month total to compare with the annual facility-wide limitations. Each month, a new twelve month total shall be calculated using the previous twelve months' data.

The permittee shall maintain a real-time log indicating the mode of operation of each unit at any particular time.

Emission calculations and the operating log shall be maintained for Division inspection upon request.

1.2 Fuel consumption shall not exceed the facility-wide limitations listed above (Construction permit 95JE1059 as modified under the provisions of Section I, Condition 1.3). The meter for each unit shall be read and recorded monthly, or more frequently as necessary to coincide with changes in modes of operation. The records of type of fuel, fuel consumption, and mode of operation shall be used to calculate emissions in Condition 1.1. The fuel consumption for all the units in the facility shall be summed and used in calculating a

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rolling twelve month total to compare with the facility-wide annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months' data.

- 1.3 Particulate emissions shall not exceed the limitations in the Table in Section III (Regulation No. 1, Sections III.A and III.C and Regulation No. 6, Part B, Sections II.C and III.C Regulation No. 6, Part B is a **state-only** requirement). In the absence of credible evidence to the contrary, compliance with the particulate standard shall be presumed whenever natural gas or propane is used as fuel for these units. For the spray dryers, in absence of credible evidence to the contrary, compliance with the particulate standard shall be presumed when compliance with Condition 1.7 is also shown.
- 1.4 Except as provided in Regulation No. 1, Section II.A.4 (see below), no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. This standard is based on 24 consecutive opacity readings taken at 15-second intervals for six minutes. The approved reference test method for visible emissions measurement on which these standards are based in EPA Method 9 (40 CFR, Part 60, Appendix A (July, 1992)) in all subsections of Section II.A of Regulation No. 1. This standard applies to all units. (Colorado Regulation No. 1, Section II.A.1).

No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, startup, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes. (Colorado Regulation No. 1, Section II.A.4)

In the absence of credible evidence to the contrary, compliance with these opacity limits shall be presumed whenever natural gas or propane is used as fuel for these units. For the spray dryers, in absence of credible evidence to the contrary, compliance with the particulate standard shall be presumed when compliance with Condition 1.7 is also shown.

- 1.5 Dryer # 5 is subject to the requirements of 40 CFR Part 60, Subpart UUU (as adopted by reference in Colorado Regulation No. 6, Part A, Subpart UUU), Standards of Performance for Calciners and Dryers in Mineral Industries, as follows.
  - 1.5.1 PM emissions from Dryer # 5 shall not exceed 0.057 g/dscm (60.732(a)). In the absence of credible evidence to the contrary, compliance with the particulate standard will be assumed if Conditions 1.5.1.1 through 1.5.1.2 below are met.
    - 1.5.1.1 Routine maintenance of the baghouse and cyclone shall be conducted in accordance with manufacturer's specifications and good engineering practices. These specifications and practices shall be in written format, and shall be made available to the Division upon request. A visual observation of each stack shall be conducted daily to document any fluctuations in performance and for prioritization of preventive maintenance activities.

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Should visible emissions, other than steam, be observed, the source shall follow steps a. and b., below and record in a log the visual observations and any action taken as a result of the observations. Should the baghouse pressure drop be observed outside the manufacturer's recommendations, the source shall follow the steps listed below.

- a. Verify that the process and control equipment are operating properly.
- b. Perform any maintenance or adjustments needed to minimize visible emissions and ensure that the process and control equipment are operating properly.
- c. Perform any maintenance or adjustments needed on the baghouse.
- d. If the baghouse pressure drop remains outside of manufacturer s specifications, the baghouse shall be internally inspected for bag integrity and overall mechanical efficiency. Powdered dye test shall be performed if the baghouse pressure drop is below the lower pressure drop set point as specified by the manufacturer. Necessary repairs shall be made prior to bringing the equipment back on line. Any action taken as a result of baghouse pressure drop shall be recorded in a daily log.
- 1.5.1.2 The baghouses shall be internally inspected for bag integrity and overall mechanical efficiency annually. Powdered dye tests shall be performed as necessary to identify faulty bags. Necessary repairs shall be made prior to bringing the equipment back on line. An adequate inventory of replacement bags and parts shall be maintained on site.
- 1.5.2 Opacity of emissions from Dryer # 5 shall not exceed 10% (60.732(b)). This opacity limit applies at all times except during periods of startup, shutdown, or malfunction (40 CFR Part 60, Subpart A, 60.11(c)).
- 1.5.3 Monitoring of emissions and operations (§60.734). This unit is not subject to the provisions of 60.734. In the absence of credible evidence to the contrary, compliance with the opacity limit is assumed when the provisions set forth in Conditions 1.5.1.1 through 1.5.1.2 above are met.
- 1.5.4 Recordkeeping and reporting requirements (§60.735). This unit is not subject to the provisions of 60.735.
- 1.5.5 Test methods and procedures (§60.736).

In addition, Dryer #5 is subject to all NSPS requirements of Colorado Regulation No. 6, Part A, Subpart A, General Provisions (40 CFR 60.1 through 60.19). Including but not limited to the following:

1.5.6 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere. (§60.12)

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- 1.5.7 Records of startups, shutdowns, and malfunctions shall be maintained, as required under §60.7.
- 1.5.8 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (40 CFR 60.11 (d))
- 1.6 Fuel burning equipment and manufacturing processes constructed, reconstructed, or modified after January 30, 1979 are subject to an opacity limit not to exceed 20%. (Colorado Regulation No. 6, Part B, Sections II.C.3 and III.C.3 **state-only** requirement). The following units are subject to this condition: Kilns L-84, L-95, L-82, L-83, L-80, and Spray Dryer Number 5. This opacity limit applies at all times except during periods of startup, shutdown, or malfunction (40 CFR Part 60, Subpart A, 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part B, I.A. In absence of credible evidence to the contrary, compliance with this opacity limit shall be presumed whenever natural gas or propane is used as fuel for these units. For spray dryer #5, in absence of credible evidence to the contrary, compliance with the particulate standard shall be presumed when compliance with Condition 1.7 is also shown. In addition, these units are subject to the provisions of Colorado Regulation No. 6, Part A, Subpart A, General Provisions (40 CFR 60.1 through 60.19).
- 1.7 With respect to the spray dryers listed in Section I, Condition 1.4 of this permit, in the absence of credible evidence to the contrary, compliance with the PM emission limits listed in Section II, Condition 1.3, and the opacity limits listed in Section II, Conditions 1.4 and 1.6 shall be presumed if natural gas or propane is used as fuel, and Conditions 1.7.1, 1.7.2, and 1.7.3, below, are met.
  - 1.7.1 The permittee shall perform a semi-annual inspection of the control equipment on the spray dryers, and perform any needed maintenance. Records of the results of inspections and any needed maintenance performed shall be maintained for inspection upon request.
  - 1.7.2 Routine maintenance of control equipment on the spray dryers shall be conducted in accordance with manufacturer's specifications or in accordance with good engineering practices, and pursuant to maintenance schedules. Such specifications, practices, and schedules shall be in written or computer accessible format and shall be made available to the Division upon request. Any maintenance work performed shall be documented and maintained to be made available to the Division upon request.
  - 1.7.3 During periods when the spray dryers are operational, a visual observation of each stack shall be conducted daily to determine if visible emissions, other than steam, are present. If visible

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emissions, other than steam, are observed, appropriate maintenance and adjustment of control equipment shall be performed, consistent with established procedures in Section II, Condition 1.7.2, and a record shall be made of such observations and the maintenance performed.

### 2. Press - Rubber Mold Press Area

| Parameter      | Permit<br>Condition<br>Number | Limitations                                                                                          | Compliance Emission<br>Factor | Monitorin<br>Method           | g<br>Interval |
|----------------|-------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------|---------------|
| VOC            | 2.1                           | 101.16 tons per year                                                                                 | 0.859 lb/hr                   | Recordkeeping and Calculation | Monthly       |
| Opacity        | 2.2                           | Less Than or Equal to 20%, except<br>during certain conditions, when<br>opacity shall not exceed 30% | NA                            | Certification                 | Annually      |
| Run-Time Hours | 2.3                           | 4000 hrs/yr                                                                                          | NA                            | Recordkeeping                 | Monthly       |

<sup>\*</sup> Emission Limitations are Facility Wide

- 2.1 Emissions of Volatile Organic Compounds shall not exceed the limitations stated above (Construction permit 95JE1059 as modified under the provisions of Section I, Condition 1.3). Emissions shall be calculated using the emission factor above and hours of operation by the end of the subsequent month and added to all other significant units. The rolling twelve month total shall be compared to the annual limitation for compliance. Each month a new twelve month total shall be calculated using the last twelve months data.
- 2.2 Except as provided for in Regulation No. 1, Section II.A.4 (below), no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. This standard is based on 24 consecutive opacity readings taken at 15-second intervals for six minutes. The approved reference test method for visible emissions measurement on which the standards in Regulation No. 1 Section II.A are based is EPA Method 9 (40 CFR, Part 60, Appendix A (July,1992)). (Colorado Regulation No. 1, Section II.A.1).

No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, startup, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six minutes in any sixty consecutive minutes. (Colorado Regulation No. 1, Section II.A.4)

By certifying compliance with this Condition 2.2, the source is certifying that no changes have been made to the equipment, process, or operation such that opacity is generated.

2.3 Hours of operation shall be recorded and logged monthly. The monthly hours shall be used in the emission calculations in Condition 2.1.

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### **SECTION IV - Particulate Emission Limitations**

### Particulate Standards - Regulation No. 1 and No. 6

| Kiln Number | Total Rating<br>(MMBtu/hr) | Particulate<br>Emission<br>Limit<br>(lb/MMBtu) | Regulation<br>No 1 or 6 | Spray<br>Number | Design Rate (ton/hr) | Particulate<br>Emission<br>Limit (lb/hr) | Regulation No 1 or 6 |
|-------------|----------------------------|------------------------------------------------|-------------------------|-----------------|----------------------|------------------------------------------|----------------------|
| L-1         | 5.445                      | 0.322                                          | 1                       | 1               | 0.85                 | 3.246                                    | 1                    |
| L-2         | 13.8                       | 0.253                                          | 1                       | 2               | 1.75                 | 5.079                                    | 1                    |
| L-3         | 7                          | 0.301                                          | 1                       | 4               | 0.4                  | 2.034                                    | 1                    |
| I-2         | 2.49                       | 0.394                                          | 1                       | 5               | 3.5                  | 7.806                                    | 1, 6                 |
| L-33        | 2.52                       | 0.393                                          | 1                       |                 |                      |                                          |                      |
| L-68        | 2.52                       | 0.393                                          | 1                       |                 |                      |                                          |                      |
| L-84        | 2.52                       | 0.393                                          | 1, 6                    |                 |                      |                                          |                      |
| L-95        | 6.5                        | 0.307                                          | 1, 6                    |                 |                      |                                          |                      |
| L-6         | 4.944                      | 0.330                                          | 1                       |                 |                      |                                          |                      |
| L-12        | 4.944                      | 0.330                                          | 1                       |                 |                      |                                          |                      |
| L-20        | 5.562                      | 0.320                                          | 1                       |                 |                      |                                          |                      |
| L-21        | 5.562                      | 0.320                                          | 1                       |                 |                      |                                          |                      |
| L-22        | 8.613                      | 0.286                                          | 1                       |                 |                      |                                          |                      |
| L-23        | 5.562                      | 0.320                                          | 1                       |                 |                      |                                          |                      |
| L-45        | 7.716                      | 0.294                                          | 1                       |                 |                      |                                          |                      |
| L-58        | 4                          | 0.349                                          | 1                       |                 |                      |                                          |                      |
| L-82        | 10                         | 0.275                                          | 1, 6                    |                 |                      |                                          |                      |
| L-83        | 10                         | 0.275                                          | 1, 6                    |                 |                      |                                          |                      |
| L-80        | 6.75                       | 0.304                                          | 1, 6                    |                 |                      |                                          |                      |
| L-18        | 4.545                      | 0.337                                          | 1                       |                 |                      |                                          |                      |
| L-19        | 4.545                      | 0.337                                          | 1                       |                 |                      |                                          |                      |
| L-81        | 0.972                      | 0.500                                          | 1                       |                 |                      |                                          |                      |
| L-8         | 0.972                      | 0.500                                          |                         |                 |                      |                                          |                      |

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### **SECTION V - Permit Shield**

Regulation No. 3, 5 CCR 1001-5, Part A, § I.B.43; Part C, V.C.1.b. & D., XIII; §§ 25-7-111(2)(I), 25-7-114.4(3)(a), C.R.S.

### 1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modification or reconstruction on which construction commenced prior to permit issuance.

No requirements have been specifically identified as non-applicable to this facility.

### 2. General Conditions

i)Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.2 The provisions of 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.3 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.4 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.5 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.6 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.7 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

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### **SECTION VI - General Permit Conditions**

### 1. Administrative Changes

### Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.36.a. The permittee may immediately make the change upon submission of the application to the Division.

### 2. Certification Requirements

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.&e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- c. Compliance certifications shall contain:
  - (i) the identification of each permit term and condition that is the basis of the certification;
  - (ii) the compliance status of the source;
  - (iii) whether compliance was continuous or intermittent;
  - (iv) the method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - (v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

### 3. Common Provisions

### Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II, E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

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b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations. Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7 1973, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- (i) Sampling ports adequate for test methods applicable to such facility,
- (ii) Safe sampling platform(s),
- (iii) Safe access to sampling platform(s).
- (iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other

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circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

### d. Upset Conditions and Breakdowns

Upset conditions, as defined, shall not be deemed to be in violation of the Colorado regulations, provided that the Division is notified as soon as possible, but no later than two (2) hours after the start of the next working day, followed by a written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing the violation and to prevent such excess emission in the future.

### e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

### f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

### g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance:
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- (vi) All emissions monitoring systems were kept in operation (if at all possible);

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- (vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,
- (viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards (NSPS) or national emissions standards for hazardous air pollutants (NESHAPS), any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall apply only to **State-Only** permit terms and conditions and shall be enforceable only by the State.

### 4. Compliance Requirements

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d., and § 25-7-122.1(2), C.R.S.

- a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.

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- d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.
- e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
  - (i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and
  - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

### 5. Emergency Provisions

### Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. the permitted facility was at the time being properly operated;
- c. during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or upset provision contained in any applicable requirement.

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### 6. Emission Standards for Asbestos

### Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "emission standards for asbestos."

### 7. Emissions Trading, Marketable Permits, Economic Incentives

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

### 8. Fee Payment

### CRS 25-7-114.1(6) and 25-7-114.7

- a. The permittee shall pay an annual emissions fee in accordance with the provisions of CRS 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- b. The permittee shall pay a permit processing fee in accordance with the provisions of CRS 25-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.
- c. The permittee shall pay an APEN fee in accordance with the provisions of CRS 25-7-114.1(6), for each APEN or revised APEN filed.

### 9. Fugitive Particulate Emissions

### Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, III.D.1.

### 10. Inspection and Entry

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;

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d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

### 11. Minor Permit Modifications

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

### 12. New Source Review

### Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

### 13. No Property Rights Conveyed

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

### 14. Odor

### Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

### 15. Off-Permit Changes to the Source

### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit . The permit shield shall not apply to any off-permit change.

### 16. Opacity

### Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

### 17. Open Burning

### Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

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### 18. Ozone Depleting Compounds

### Regulation No. 15, 5 CCR 1001-17

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds.

### 19. Permit Expiration and Renewal

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

### 20. Portable Sources

### Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

### 21. Prompt Deviation Reporting

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Unless required by a permit term or condition to report deviations on a more frequent basis, "prompt" reporting shall entail submission of reports of deviations from permit requirements every six (6) months in accordance with paragraph 22.d. below. "Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

### 22. Record Keeping and Reporting Requirements

### Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
  - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
  - (ii) date(s) on which analyses were performed;
  - (iii) the company or entity that performed the analysis;
  - (iv) the analytical techniques or methods used;
  - (v) the results of such analysis; and

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- (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.
- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the enhanced monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

### 23. Reopenings for Cause

### Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.

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- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

### **24.** Section 502(b)(10) Changes

### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

### 25. Severability Clause

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

### 26. Significant Permit Modifications

### Regulation No. 3, 5 CCR 1001-5, Part C, §III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

### 27. Special Provisions Concerning the Acid Rain Program

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

### 28. Transfer or Assignment of Ownership

### Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

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### 29. Volatile Organic Compounds

### Regulation No. 7. 5 CCR 1001-9, §§ III & V.

- a. For sources located in an ozone non-attainment area or the Denver Metro Attainment Maintenance Area, all storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.
  - i)Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.
  - ii)Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.
- b. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.

### 30. Wood Stoves and Wood burning Appliances

### Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

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## **OPERATING PERMIT APPENDICES**

- A INSPECTION INFORMATION
- **B COMPLIANCE MONITORING REPORT FORMAT**
- C COMPLIANCE CERTIFICATION REPORT FORMAT
- **D-NOTIFICATION ADDRESSES**
- E PERMIT ACRONYMS
- F PERMIT MODIFICATIONS

### \*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable and is presented to assist the source, permitting authority, inspectors, and citizens.

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### **APPENDIX A - Inspection Information**

### **Directions to Plant:**

The facility is located at the west corner of Ninth and Ford Streets, approximately 8 blocks north of downtown Golden, in an urban/industrialized area. It is approximately 3 blocks north of Clear Creek and 3 blocks south of Colorado Highway 58. South Table Mountain is about 3 miles west. North Table Mountain is about 2 miles north.

### **Safety Equipment Required:**

Eye Protection, Safety shoes, and Hearing Protection

### **Facility Plot Plan:**

Figure 1 (following page) shows the plot plan as submitted on September 25, 1998 with the source's Title V Operating Permit Application.

### **List of Insignificant Activities:**

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Insignificant activities and/or sources of emissions as submitted in the application are as follows:

Large wash line

Small electric tunnel kiln

Fume hood

Lab outlets

Sam Dick Q 1375V vaporizer

Two LPG pressurized tanks, 18,000 gal each

Peerless process heater

Peerless plant heater

Cleaver Brooks steam (bldg.) heater

Rheem, Lennox et al HVAC units (comfort heaters)

American Wheelabrator refractory presses

Various dry presses, 3 electric kilns

Various operations (dryers, sanders, lathe, glaze machines, presses and pelletizers)

Material handling

Refractory/SiC Dust Collector

One electric oven and an electric periodic kiln

Two Spray coating booths

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First Issued: August 1, 1999 Renewed: October 1, 2004 Fast fire R&D kiln R&D spray dryer for material engineering Ceramic fuel cell R&D laboratory (with ovens and hoods) Material engineering laboratory Dust collectors

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# **APPENDIX B Reporting Requirements and Definitions**

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C.) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

### **Report #1: Monitoring Deviation Report** (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

### **Report #2: Permit Deviation Report** (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit Operating Permit Number: 98OPJE205

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requirements, including those attributable to upset conditions and malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "upset" shall refer to both emergency conditions and upsets. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due every six months unless otherwise noted in the permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report.

### **Report #3: Compliance Certification** (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

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- The identification of each term or condition of the permit that is the basis of the certification:
- The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each permit term and condition during the certification period and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.<sup>1</sup>
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred.

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

<sup>1</sup> For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event. Further, periods of excess emissions during startup, shutdown and malfunction may not be found to be a violation of an emission limitation or standard where the source adequately shows that any potential deviations as a result of these infrequent periods were minimized to the extent practicable and could not have been prevented through careful planning, design, or were unavoidable to prevent loss of life, personal injury, or severe property damage.

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### Startup, Shutdown, Malfunctions, Emergencies, and Upsets

Understanding the application of Startup, Shutdown, Malfunctions, Emergency provisions, and the Upset provisions is very important in both the deviation reports and the annual compliance certifications.

### Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

### **Emergencies and Upsets**

Under the Emergency provisions of Part 70 and the Upset provisions of the State regulations, certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

### **DEFINITIONS**

**Malfunction** (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**Malfunction** (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

**Emergency** means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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**Upset** means an unpredictable failure of air pollution control or process equipment which results in the violation of emission control regulations and which is not due to poor maintenance, improper or careless operations, or is otherwise preventable through exercise of reasonable care.

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### APPENDIX B: Monitoring and Permit Deviation Report - Part I

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division on a semi-annual basis unless otherwise noted in the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or upset or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or Upsets) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: CoorsTek, Inc. OPERATING PERMIT NO: 980PJE205 REPORTING PERIOD:

| Operating      |                                                                                | Deviations<br>Period? <sup>1</sup> | N | oted | During | Upset/Emergenc<br>Reported During |    |
|----------------|--------------------------------------------------------------------------------|------------------------------------|---|------|--------|-----------------------------------|----|
| Permit Unit ID | Unit Description                                                               | YES                                |   | NO   |        | YES                               | NO |
| L-1            | H.H. Robertson Tunnel Kiln, Rated at 5.445 MMBtu/hr (1929).                    |                                    |   |      |        |                                   |    |
| L-2            | Allied Engineering Tunnel Kiln, Rated at 13.8 MMBtu/hr (1942).                 |                                    |   |      |        |                                   |    |
| L-3            | Coors Ceramics Tunnel Kiln, Rated at 7.0 MMBtu/hr (1949).                      |                                    |   |      |        |                                   |    |
| I-2            | Ladd-Cronin Engineering Circular Tunnel Kiln, Rated at 2.49 MMBtu/hr (1934).   |                                    |   |      |        |                                   |    |
| L-33           | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 20059 (1966).                |                                    |   |      |        |                                   |    |
| L-68           | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 23271 (1973).                |                                    |   |      |        |                                   |    |
| L-84           | Lindberg Tunnel Kiln, Rated at 2.52 MMBtu/hr, SN: 43-228121-C1K31G (1991).     |                                    |   |      |        |                                   |    |
| L-95           | Temtek-Eisenman/Champion Tunnel Kiln, Rated at 6.5 MMBtu/hr, SN: 74112 (1995). |                                    |   |      |        |                                   |    |
| L-6            | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                               |                                    |   |      |        |                                   |    |
| L-12           | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                               |                                    |   |      |        |                                   |    |
| L-20           | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                            |                                    |   |      |        |                                   |    |
| L-21           | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                            |                                    |   |      |        |                                   |    |
| L-22           | Coors Updraft Kiln, Rated at 8.613 MMBtu/hr (1961).                            |                                    |   |      |        |                                   |    |
| L-23           | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                            |                                    |   |      |        |                                   |    |
| L-45           | Coors Tube Kiln, Rated at 7.716 MMBtu/hr (1969).                               |                                    |   |      |        |                                   |    |
| L-58           | Bickley Model 550 Downdraft Kiln, Rated at 4 MMBtu/hr, SN: 890 (1975).         |                                    |   |      |        |                                   |    |
| L-82           | Bickley 5300 - Carbell Kiln, Rated at 10 MMBtu/hr (1988).                      |                                    |   |      |        |                                   |    |

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| Operating      |                                                                                                          | Deviations<br>Period? <sup>1</sup> | N | oted | During | Upset/Emerg<br>Reported Du |    |
|----------------|----------------------------------------------------------------------------------------------------------|------------------------------------|---|------|--------|----------------------------|----|
| Permit Unit ID | Unit Description                                                                                         | YES                                |   | NO   |        | YES                        | NO |
| L-83           | Bickley 5300 - Carbell Kiln, Rated at 10 MMBtu/hr (1988).                                                |                                    |   |      |        |                            |    |
| L-80           | Texas Kiln Co. PCS 64/1 Kiln, Rated at 6.75 MMBtu/hr (1980).                                             |                                    |   |      |        |                            |    |
| L-18           | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1953).                                                     |                                    |   |      |        |                            |    |
| L-19           | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1954).                                                     |                                    |   |      |        |                            |    |
| L-8            | Harrop & Coors Test Kiln/Furnace, Rated at 0.972 MMBtu/hr (1960).                                        |                                    |   |      |        |                            |    |
| L-81           | Harrop & Coors Test Kiln/Furnace, Rated at 0.972 MMBtu/hr (1960).                                        |                                    |   |      |        |                            |    |
| D#1            | Coors Spray Dryer w/ Dust Collector, Rated at 3.24 MMBtu/hr (1943).                                      |                                    |   |      |        |                            |    |
| D#2            | Coors Spray Dryer w/ Dust Collector, Rated at 5.4 MMBtu/hr (1962).                                       |                                    |   |      |        |                            |    |
| D#4            | Bowen Engineering #4 Slip Spray Dryer w/ Cyclone and Wet Scrubber, Rated at 2.403 MMBtu/hr (1978).       |                                    |   |      |        |                            |    |
| D#5            | Ceramic Slip Dryer w/ Cyclone and Dust Collector, Rated at 4.76 MMBtu/hr, SN: 20514200-3410-SD-1 (1997). |                                    |   |      |        |                            |    |
| Press          | Rubber Mold Press Area                                                                                   |                                    |   |      |        |                            |    |
|                | General Conditions                                                                                       |                                    |   |      |        |                            |    |
|                | Insignificant Activities <sup>3</sup>                                                                    |                                    |   |      |        |                            |    |

<sup>&</sup>lt;sup>1</sup> See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

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## **APPENDIX B: Monitoring and Permit Deviation Report - Part II**

| FACILITY NAME:<br>OPERATING PERMIT NO:<br>REPORTING PERIOD: | ŕ                       |               |          |             |
|-------------------------------------------------------------|-------------------------|---------------|----------|-------------|
| Is the deviation being claimed                              | d as an:                | Emergency     | Upset    | N/A         |
| (For NSPS/MACT) Did the d                                   | leviation occur during: | Startup       | Shutdown | Malfunction |
| Normal Oper                                                 | ration                  |               |          |             |
| OPERATING PERMIT UNI                                        | T IDENTIFICATION:       |               |          |             |
| Operating Permit Condition N                                | Number Citation         |               |          |             |
| Explanation of Period of Dev                                | riation                 |               |          |             |
| Duration (start/stop date & tin                             | me)                     |               |          |             |
| Action Taken to Correct the I                               | <u>Problem</u>          |               |          |             |
| Measures Taken to Prevent a                                 | Reoccurrence of the Pr  | <u>roblem</u> |          |             |
| Dates of Upsets/Emergencies                                 | Reported (if applicable | <u>2)</u>     |          |             |
| Deviation Code (for Division                                | Use Only)               |               |          |             |
|                                                             |                         |               |          |             |

#### SEE EXAMPLE ON THE NEXT PAGE

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### **EXAMPLE**

FACILITY NAME: Acme Corp. OPERATING PERMIT NO: 96OPZZXXX REPORTING PERIOD: 1/1/96 - 6/30/96 Emergency \_\_\_\_\_ Upset XX N/A Is the deviation being claimed as an: (For NSPS/MACT) Did the deviation occur during: Startup \_\_\_\_\_ Shutdown \_\_\_\_\_ Malfunction Normal Operation OPERATING PERMIT UNIT IDENTIFICATION: Asphalt Plant with a Scrubber for Particulate Control - Unit XXX Operating Permit Condition Number Citation Section II, Condition 3.1 - Opacity Limitation Explanation of Period of Deviation Slurry Line Feed Plugged Duration START- 1730 4/10/96 END- 1800 4/10/96 Action Taken to Correct the Problem Line Blown Out Measures Taken to Prevent Reoccurrence of the Problem Replaced Line Filter Dates of Upsets/Emergencies Reported (if applicable) 4/10/96 to S. Busch, APCD Deviation Code (for Division Use Only)

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# APPENDIX B: Monitoring and Permit Deviation Report - Part III REPORT CERTIFICATION

| SOURCE NAME: CoorsTek, Inc.                     |                                                                                                                                                                                                         |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FACILITY IDENTIFICATION NUMBER:                 | 0590066                                                                                                                                                                                                 |
| PERMIT NUMBER: 980PJE205                        |                                                                                                                                                                                                         |
| REPORTING PERIOD:                               | (see first page of the permit for specific reporting period and dates)                                                                                                                                  |
| responsible official signing this certification | al Deviation Reports must be certified by a responsible official. The must be pre-approved by the Division in accordance with Colorado. This signed certification document must be packaged with the    |
| STATEMENT OF COMPLETENESS                       |                                                                                                                                                                                                         |
|                                                 | submitted in its entirety and, based on information and belief<br>that the statements and information contained in this submittal                                                                       |
| 1-501(6), C.R.S., makes any false materia       | tte that any person who knowingly, as defined in Sub-Section 18-<br>al statement, representation, or certification in this document is<br>unished in accordance with the provisions of Sub-Section 25-7 |
| Printed or Typed Name                           | Title                                                                                                                                                                                                   |
| Signature of Responsibl                         | e Official Date Signed                                                                                                                                                                                  |
|                                                 |                                                                                                                                                                                                         |

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## **APPENDIX** C Format for Annual Compliance Certification Reports

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: CoorsTek, Inc.

OPERATING PERMIT NO: 980PJE205

REPORTING PERIOD:

### I. Facility Status

\_\_\_\_ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

|                             |                                                                                       | Deviations Reported <sup>1</sup> |         | Monitoring Method per Permit? <sup>2</sup> |    | Was compliance continuous or intermittent? <sup>3</sup> |              | Was Data<br>Continuous? <sup>4</sup> |    |
|-----------------------------|---------------------------------------------------------------------------------------|----------------------------------|---------|--------------------------------------------|----|---------------------------------------------------------|--------------|--------------------------------------|----|
| Operating<br>Permit Unit ID | Unit Description                                                                      | Previous                         | Current | YES                                        | NO | Continuous                                              | Intermittent | YES                                  | NO |
| L-1                         | H.H. Robertson Tunnel<br>Kiln, Rated at 5.445<br>MMBtu/hr (1929).                     |                                  |         |                                            |    |                                                         |              |                                      |    |
| L-2                         | Allied Engineering Tunnel<br>Kiln, Rated at 13.8<br>MMBtu/hr (1942).                  |                                  |         |                                            |    |                                                         |              |                                      |    |
| L-3                         | Coors Ceramics Tunnel<br>Kiln, Rated at 7.0<br>MMBtu/hr (1949).                       |                                  |         |                                            |    |                                                         |              |                                      |    |
| I-2                         | Ladd-Cronin Engineering<br>Circular Tunnel Kiln,<br>Rated at 2.49 MMBtu/hr<br>(1934). |                                  |         |                                            |    |                                                         |              |                                      |    |
| L-33                        | Lindberg Tunnel Kiln,<br>Rated at 2.52 MMBtu/hr,<br>SN: 20059 (1966).                 |                                  |         |                                            |    |                                                         |              |                                      |    |

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|                             |                                                                                             | Deviations | Reported <sup>1</sup> | Monitor<br>Method<br>Permit? | per | Was complia<br>or intermitten | ance continuous t? <sup>3</sup> | Was<br>Continu | Data<br>nous? <sup>4</sup> |
|-----------------------------|---------------------------------------------------------------------------------------------|------------|-----------------------|------------------------------|-----|-------------------------------|---------------------------------|----------------|----------------------------|
| Operating<br>Permit Unit ID | Unit Description                                                                            | Previous   | Current               | YES                          | NO  | Continuous                    | Intermittent                    | YES            | NO                         |
| L-68                        | Lindberg Tunnel Kiln,<br>Rated at 2.52 MMBtu/hr,<br>SN: 23271 (1973).                       |            |                       |                              |     |                               |                                 |                |                            |
| L-84                        | Lindberg Tunnel Kiln,<br>Rated at 2.52 MMBtu/hr,<br>SN: 43-228121-C1K31G<br>(1991).         |            |                       |                              |     |                               |                                 |                |                            |
| L-95                        | Temtek-<br>Eisenman/Champion<br>Tunnel Kiln, Rated at 6.5<br>MMBtu/hr, SN: 74112<br>(1995). |            |                       |                              |     |                               |                                 |                |                            |
| L-6                         | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                                            |            |                       |                              |     |                               |                                 |                |                            |
| L-12                        | Coors Tube Kiln, Rated at 4.944 MMBtu/hr (1929).                                            |            |                       |                              |     |                               |                                 |                |                            |
| L-20                        | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                                         |            |                       |                              |     |                               |                                 |                |                            |
| L-21                        | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                                         |            |                       |                              |     |                               |                                 |                |                            |
| L-22                        | Coors Updraft Kiln, Rated at 8.613 MMBtu/hr (1961).                                         |            |                       |                              |     |                               |                                 |                |                            |
| L-23                        | Coors Updraft Kiln, Rated at 5.562 MMBtu/hr (1961).                                         |            |                       |                              |     |                               |                                 |                |                            |
| L-45                        | Coors Tube Kiln, Rated at 7.716 MMBtu/hr (1969).                                            |            |                       |                              |     |                               |                                 |                |                            |
| L-58                        | Bickley Model 550<br>Downdraft Kiln, Rated at 4<br>MMBtu/hr, SN: 890<br>(1975).             |            |                       |                              |     |                               |                                 |                |                            |
| L-82                        | Bickley 5300 - Carbell<br>Kiln, Rated at 10<br>MMBtu/hr (1988).                             |            |                       |                              |     |                               |                                 |                |                            |
| L-83                        | Bickley 5300 - Carbell<br>Kiln, Rated at 10<br>MMBtu/hr (1988).                             |            |                       |                              |     |                               |                                 |                |                            |
| L-80                        | Texas Kiln Co. PCS 64/1<br>Kiln, Rated at 6.75<br>MMBtu/hr (1980).                          |            |                       |                              |     |                               |                                 |                |                            |
| L-18                        | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1953).                                        |            |                       |                              |     |                               |                                 |                |                            |
| L-19                        | Coors Updraft Kiln, Rated ate 4.545 MMBtu/hr (1954).                                        |            |                       |                              |     |                               |                                 |                |                            |
| L-8                         | Harrop & Coors Test                                                                         |            |                       |                              |     |                               |                                 |                |                            |

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|                             |                                                                                                                       | Deviations Reported <sup>1</sup> |         | Monitoring Method per Permit? <sup>2</sup> |    | Was compliance continuous or intermittent? <sup>3</sup> |              | Was Data<br>Continuous? <sup>4</sup> |    |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------|---------|--------------------------------------------|----|---------------------------------------------------------|--------------|--------------------------------------|----|
| Operating<br>Permit Unit ID | Unit Description                                                                                                      | Previous                         | Current | YES                                        | NO | Continuous                                              | Intermittent | YES                                  | NO |
|                             | Kiln/Furnace, Rated at 0.972 MMBtu/hr (1960).                                                                         |                                  |         |                                            |    |                                                         |              |                                      |    |
| L-81                        | Harrop & Coors Test<br>Kiln/Furnace, Rated at<br>0.972 MMBtu/hr (1960).                                               |                                  |         |                                            |    |                                                         |              |                                      |    |
| D#1                         | Coors Spray Dryer w/ Dust<br>Collector, Rated at 3.24<br>MMBtu/hr (1943).                                             |                                  |         |                                            |    |                                                         |              |                                      |    |
| D#2                         | Coors Spray Dryer w/ Dust<br>Collector, Rated at 5.4<br>MMBtu/hr (1962).                                              |                                  |         |                                            |    |                                                         |              |                                      |    |
| D#4                         | Bowen Engineering #4 Slip<br>Spray Dryer w/ Cyclone<br>and Wet Scrubber, Rated at<br>2.403 MMBtu/hr (1978).           |                                  |         |                                            |    |                                                         |              |                                      |    |
| D#5                         | Ceramic Slip Dryer w/<br>Cyclone and Dust<br>Collector, Rated at 4.76<br>MMBtu/hr, SN: 20514200-<br>3410-SD-1 (1997). |                                  |         |                                            |    |                                                         |              |                                      |    |
| Press                       | Rubber Mold Press Area                                                                                                |                                  |         |                                            |    |                                                         |              |                                      |    |
|                             | General Conditions                                                                                                    |                                  |         |                                            |    |                                                         |              |                                      |    |
|                             | Insignificant Activities <sup>5</sup>                                                                                 |                                  |         |                                            |    |                                                         |              |                                      |    |

If deviations were noted in the previous deviation report (i.e. for the first six months of the annual reporting period), put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

<sup>&</sup>lt;sup>2</sup> Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

<sup>&</sup>lt;sup>3</sup> Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance"can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

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The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

**NOTE:** All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

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<sup>&</sup>lt;sup>4</sup> Note whether the method(s) used to determine the compliance status with each term and condition provided continuous or intermittent data. <sup>5</sup> Compliance status for these sources shall be based on a reasonable inquiry using readily available information. Status for Accidental Release Prevention Program: II. This facility \_\_\_\_\_ is subject \_\_\_\_\_ is not subject to the provisions of the Accidental A. Release Prevention Program (Section 112(r) of the Federal Clean Air Act) If subject: The facility is B. is not in compliance with all the requirements of section 112(r). will be has been submitted to the A Risk Management Plan appropriate authority and/or the designated central location by June 20, 1999. III.. Certification I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete. Please note that the Colorado Statutes state that any person who knowingly, as defined in 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of 25-7 122.1, C.R.S. Printed or Typed Name Title Date Signed Signature

#### APPENDIX D Notification Addresses

#### 1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

ATTN: Jim King

#### 2. United States Environmental Protection Agency

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202

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### APPENDIX E **Permit Acronyms**

#### Listed Alphabetically:

| AIRS -  | Aerometric Information Retrieval System               |
|---------|-------------------------------------------------------|
| AP-42 - | EPA Document Compiling Air Pollutant Emission Factors |
| APEN -  | Air Pollution Emission Notice (State of Colorado)     |
| APCD -  | Air Pollution Control Division (State of Colorado)    |
| ASTM -  | American Society for Testing and Materials            |
| BACT -  | Best Available Control Technology                     |
| BTU -   | British Thermal Unit                                  |
| CAA -   | Clean Air Act (CAAA = Clean Air Act Amendments)       |
| CCR -   | Colorado Code of Regulations                          |
| CEM -   | Continuous Emissions Monitor                          |
| CF -    | Cubic Feet (SCF = Standard Cubic Feet)                |
| CFR -   | Code of Federal Regulations                           |
| CO -    | Carbon Monoxide                                       |
| COM -   | Continuous Opacity Monitor                            |
| CRS -   | Colorado Revised Statute                              |
| EF -    | Emission Factor                                       |

EPA -**Environmental Protection Agency** FI -Fuel Input Rate in Lbs/mmBtu

FR -Federal Register

G-Grams Gal -Gallon

GPM -Gallons per Minute Hazardous Air Pollutants HAPs -

HP -Horsepower

Horsepower Hour (G/HP-HR = Grams per Horsepower Hour) HP-HR -

Lowest Achievable Emission Rate LAER -

LBS -**Pounds** M -Thousand MM -Million

MMscf -Million Standard Cubic Feet

Million Standard Cubic Feet per Day MMscfd -

N/A or NA -Not Applicable Nitrogen Oxides NOx -

National Emission Standards for Hazardous Air Pollutants NESHAP -

NSPS -New Source Performance Standards P -Process Weight Rate in Tons/Hr

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| PE - | Particulate Emissions |
|------|-----------------------|
| PM - | Particulate Matter    |

PM10 -Particulate Matter Under 10 Microns Prevention of Significant Deterioration PSD -

PTE -Potential To Emit

Reasonably Available Control Technology RACT -

Source Classification Code SCC -

SCF -Standard Cubic Feet

SIC -Standard Industrial Classification

SO2 -Sulfur Dioxide TPY -Tons Per Year

Total Suspended Particulate TSP -Volatile Organic Compounds VOC -

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## **APPENDIX F Permit Modifications**

| DATE OF<br>REVISION | TYPE OF<br>REVISION          | SECTION NUMBER, CONDITION NUMBER                     | DESCRIPTION OF REVISION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| October 1, 2004     | Minor Permit<br>Modification | Section II,<br>Conditions 1.5.2,<br>1.5.3, and 1.5.4 | In accordance with the preamble to Subpart UUU and EPA guidance, these conditions are revised to indicate the dryer is not subject to the continuous opacity monitoring requirements because emissions are less than 11 tons/year. (Therefore the COM recordkeeping requirements also do not apply.) (This revision is included as part of the renewal permit. The renewed permit was held until EPA reviewed this revision.) Periodic monitoring for the opacity limit is baghouse operation and maintenance. |
|                     |                              |                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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